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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,180	05/31/2001	Mark Tetreault	SRT-016	9989
21323	7590	10/19/2004		
TESTA, HURWITZ & THIBEAULT, LLP HIGH STREET TOWER 125 HIGH STREET BOSTON, MA 02110				
			EXAMINER MASKULINSKI, MICHAEL C	
			ART UNIT 2113	PAPER NUMBER 9
DATE MAILED: 10/19/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Interview Summary

Application No.

09/871,180

Applicant(s)

TETREAUULT, MARK

Examiner

Michael C Maskulinski

Art Unit

2113

All participants (applicant, applicant's representative, PTO personnel):

(1) Michael C Maskulinski.(3) Andrew Abramson.(2) Patrick Myers.

(4) \_\_\_\_.

Date of Interview: 15 September 2004.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_.

Claim(s) discussed: 1.

Identification of prior art discussed: Buckland; Goodrum et al..

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Michael Maskulinski  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

#### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

##### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The attached claim amendments were discussed, specifically the last limitation stating that the isolation control logic transmits an isolation switch control signal to the isolation switch in response to the generated bus idle status signal from the bus interface logic and the received device isolation signal on the device isolation control line. The Applicant's representatives explained that both signals must be present at the same time in order for the isolation control logic to transmit an isolation switch control signal to the isolation switch. The Examiner noted this and will take it into consideration when examining the amendment when it is filed .

## AMENDMENT

### Amendments to the Claims

A complete listing of the claims follows. Please cancel claim 14 and amend claims 1, 5, 7-10, 13, 19, 22, 24, and 28 as indicated below. All other claims remain the same as originally presented in the application.

1. (Currently amended) An apparatus for isolating, in response to a device isolation signal and a bus idle status signal, a device from a bus without interrupting system operation, the apparatus comprising:

bus interface logic in communication with the bus, the bus interface logic generating a signal indicating the idle status of the bus;

an isolation switch in communication with the bus;

a device isolation control line; and

isolation control logic in communication with the bus interface logic, the device isolation control line, and the isolation switch,

wherein the isolation control logic transmits an isolation switch control signal to the isolation switch in response to the generated bus idle status signal from the bus interface logic and at the received device isolation signal on the device isolation control line.

2. (Original) The apparatus of claim 1 wherein the bus interface logic comprises a state machine.
3. (Original) The apparatus of claim 1 wherein the bus interface logic comprises combinatorial logic.

4. (Original) The apparatus of claim 1 wherein the bus interface logic monitors all bus transactions.
5. (Currently amended) The apparatus of claim 1 wherein the bus idle status signal generated by the bus interface logic indicates that the bus is idle.
6. (Original) The apparatus of claim 1 wherein the isolation control logic comprises combinatorial logic.
7. (Currently amended) The apparatus of claim 1 wherein the isolation control logic receives the device isolation signal on the device isolation control line from logic monitoring the operational status of the system.
8. (Currently amended) The apparatus of claim 1 wherein the isolation control logic receives the device isolation signal on the device isolation control line from a hot-plug logic element.
9. (Currently amended) The apparatus of claim 8 wherein the hot-plug logic element generates the device isolation signal on the device isolation control line responsive to the physical removal of the device from its slot.
10. (Currently amended) The apparatus of claim 1 wherein the isolation control logic receives the device isolation signal on the device isolation control line from protocol checker logic monitoring the validity of bus transactions.
11. (Currently amended) The apparatus of claim 10 wherein the protocol checker logic generates the device isolation signal on the device isolation control line responsive to a detected protocol violation.
12. (Original) The apparatus of claim 10 wherein the bus transactions are communicated on the bus in relation to clock cycles.

13. (Currently amended) The apparatus of claim 12 wherein the protocol checker logic generates the device isolation signal on the device isolation control line during the same clock cycle as the detected protocol violation.
14. (Canceled)
15. (Original) The apparatus of claim 1 wherein the isolation control logic comprises a timer measuring elapsed time.
16. (Original) The apparatus of claim 15 wherein the timer measures elapsed time relative to a system event.
17. (Original) The apparatus of claim 16 wherein a timeout signal is generated in response to the elapsed time exceeding a predetermined threshold.
18. (Currently amended) The apparatus of claim 17 wherein the isolation control logic transmits a bus reset signal responsive to receiving both the device isolation signal on the device isolation control line and the timeout signal from the timer.
19. (Currently amended) In a system having a bus controlled by a bus controller, a device isolation control line, and having at least one bus device in communication with the bus via an isolation switch, a method for isolating the bus device from the bus, the method comprising the steps:
- (a) receiving a signal on the device isolation control line identifying a bus device to be isolated, the bus device performing a bus transaction;
  - (b) receiving a bus idle status signal; and
  - (c) transmitting an isolation switch control signal responsive to both the received device isolation signal and the received bus idle status signal.

20. (Original) The method of claim 19 further comprising the step of isolating the identified bus device from the bus responsive to the received bus device isolation signal.
21. (Original) The method of claim 19 further comprising the step of inhibiting bus access.
22. (Currently amended) The method of claim 19 further comprising the steps of:
- (a) receiving a timeout signal; and
  - (b) resetting the bus responsive to receiving both the timeout signal and the bus status idle signal indicating that the bus is not idle.
23. (Original) The method of claim 22 wherein step (b) comprises isolating the bus controller from the bus.
24. (Currently amended) An apparatus for isolating a device from a bus without interrupting system operation, the apparatus comprising:
- means for receiving a signal identifying a bus device to be isolated, the identified bus device performing a bus transaction;
  - means for receiving a bus idle status signal; and
  - means for transmitting an isolation switch control signal responsive to both the received bus device isolation signal and the received bus idle status signal.
25. (Original) The apparatus of claim 24 further comprising a means for isolating the identified bus device from the bus responsive to the received bus device isolation signal.



26. (Original) The apparatus of claim **25** wherein the bus device isolation means comprises an isolation switch.
27. (Original) The apparatus of claim **24** further comprising a means for inhibiting bus access.
28. (Currently amended)      The apparatus of claim **24** further comprising:
- a timing means providing a timeout signal; and
- a bus reset means resetting the bus responsive to receiving both the  
|      timeout signal and the bus idle status signal indicating that the bus is not idle.
29. (Original) The apparatus of claim **28** wherein the bus reset means isolates the bus controller from the bus.